

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
19 February 2004 (19.02.2004)

PCT

(10) International Publication Number  
**WO 2004/014197 A1**

(51) International Patent Classification?: A47F 7/14, 5/11

(21) International Application Number:  
PCT/GB2003/003363

(22) International Filing Date: 1 August 2003 (01.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0218529.6 9 August 2002 (09.08.2002) GB

(71) Applicant (for all designated States except US): **LIGHTHOUSE DISPLAY INTERNATIONAL LIMITED** [GB/GB]; The Thunderbay Works, Crossgate Drive, Nottingham NG2 1LQ (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SPEED, Neil, Hugh,**

Forsyth [GB/GB]; The Thunderbay Works, Crossgate Drive, Nottingham NG2 1LQ (GB). **SIMPSON, Alec,** Michael [GB/GB]; The Thunderbay Works, Crossgate Drive, Nottingham NG2 1LQ (GB).

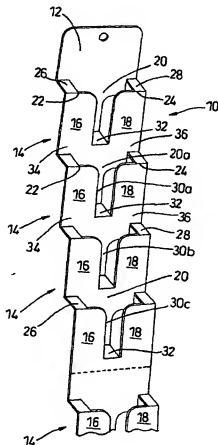
(74) Agent: **HULSE, Graham;** Hulsemarque, 157 Sandygate Road, Sheffield S10 5SA (GB).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: **DISPLAY DEVICE AND BLANK THEREFOR**



(57) Abstract: A display device (10) comprises an elongate strip (12) of sheet material having a plurality of product carrying pockets (14) each pocket (14) being provided with a pair of laterally spaced front sections (16, 18) in a plane substantially parallel to the plane of an adjacent rear section (20) of the elongate strip (12), each front section (16, 18) being attached to said rear section (20) at its upper edge (22, 24) respectively, by means of upper bridge portions (26, 28), further attachment between a further section (30) of the rear section (20) and the front sections (16, 18) is provided by a lower bridge portion (32) intermediate the front sections (16, 18) and which is attached adjacent the lower edges (34, 36) thereof.

WO 2004/014197 A1

WO 2004/014197 A1



European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

— with international search report

## **DISPLAY DEVICE AND BLANK THEREFOR**

### **FIELD OF THE INVENTION**

This invention relates to display devices and blanks for the same of a type similar to those known as strip merchandisers. Strip merchandisers, also known as clip-strips, generally comprise an elongate strip having means thereon to carry multiples of product which can be suspended on or from a shelf or other retail display device.

### **BACKGROUND OF THE INVENTION**

Strip merchandisers are widely used throughout the retail trade to take advantage of cross-selling opportunities between products and to create impulse purchases without using valuable shelf space. They are also useful to display a plurality of discrete articles in a prominent manner using the least amount of available display area.

Examples of such strip merchandisers are described in US Patents US 4,483,502 & US 4,546,943.

As can be seen in the art, strip merchandisers are provided with a plurality of longitudinally spaced hooks upon which product may be hung. Many items are sold in packaging having a convenient tab in which a suitable hole or slot can be made enabling the products to be readily displayed on a strip merchandiser. Unfortunately this is not always possible or convenient, either the packaging size or shape does not easily take a punched hole or slot, as in cosmetics sachets for example, or the product does not usually have any additional packaging, as in a paperback book. It is possible to attach tabs having slots therein to each item. Tabs of this type are described in many Patent publications including WO00/26109; US5,542,634; US5,020,761; and US4,890,809 but these can have their own

disadvantages. The adhesive on the tab may not always attach or remain attached to the product. For example the package may be a sachet which has been sealed by heat sealing or the like so that the edges of the sachet are no longer flat and do not readily adhere to the tab. In other cases, the adhesive may damage the product, for example the cover of a book. It will also be apparent to one skilled in the art that these tabs invariably are applied manually and the expense through added labour and material costs is not attractive. The current requirement from many retailers is for products to be delivered by the manufactures/wholesalers already attached to a strip merchandiser. If product is damage or detached from a strip then there is every chance that the whole strip or even the batch may be rejected.

It is one object of the present invention to provide a display device akin to a strip merchandiser whereby the disadvantages described above may be overcome.

## SUMMARY OF THE INVENTION

According to one aspect of the present invention a display device comprises an elongate strip of sheet material having a plurality of product carrying pockets each pocket being provided with a pair of laterally spaced front sections in a plane substantially parallel to the plane of an adjacent rear section of the elongate strip, each front section being attached to said rear section of the elongate strip, at or adjacent an upper edge thereof, by means of an upper bridge portion, a further attachment between a further section of the elongate strip and the front portions is provided by at least one lower bridge intermediate the front portions and which is attached thereto at or adjacent the lower edges thereof and the pockets being arranged one above another so that the front sections of an upper pocket are

in integral and coplanar attachment with the rear sections of a pocket immediately below.

It will be seen that products may be held in the space defined by at least the front and rear sections and the at least one lower bridge portion. For additional security and to prevent accidental removal of products from the pockets one or both of the front portions, may be provided with detent means to firmly engage the product when located in the pocket. Such detent means is preferably provided in both front portions and may each comprise a tab adapted to abut either side of the products. The tab is preferably integral with the front portion.

The upper and lower bridge portions are preferably integral with respective areas of the front and rear sections and may provided by part of the respective section thereof or in one embodiment are provided by such parts which extend therebetween substantially at right angles to the substantially parallel planes, which parts being defined by fold-lines adapted to allow the bridge portions to remain substantially at right angle to the parallel planes at least during use.

The display device may be provided with any convenient number of pockets which may be arranged continuously in stepped arrangement as described above. For convenience the display device is preferably provided with means to enable the loaded display device to be folded at least once along its length so that the loaded display device may be conveniently packed in a suitable carton or other container for shipment. In one embodiment the stepped arrangement is interrupted by an intermediate flat section of elongate strip which flat section carries means to facilitate a fold. Such means to facilitate the fold may be provided by a score-line, perforations or any other convenient means. Where perforations are provided that strip may also be readily split so as to produce a series of shorter strips, which may suit a particular retailer or to remove a section of display device from which all the product has been purchased.

Preferably the display device is provided at its head with means to attach the display device to other display apparatus. Such means may be provided by a hole or slot or self-adhesive tape or by any other convenient means. Where the display device is capable of being split, further attachment means may be provided below the perforations in the intermediate flat section.

It is a particular advantage of the present invention that the display device may be manufactured from a single sheet of material which sheet is provided with a series of cuts and fold lines which form the various sections and portions of the pockets.

According to another aspect of the present invention a blank for a display device of the type having a plurality of product carrying pockets comprises an elongate sheet of suitable material having a pair of substantially parallel spaced lines of longitudinal cuts running substantially centrally along at least one section of the sheet material, a second pair of substantially parallel spaced lines of longitudinal cuts running one each intermediate the first pair of lines and a respective edge of the sheet, adjacent cuts in the first and second lines being joined by a connecting cut between the leading end of a respective cut in the second pair of lines and the trailing end of a respective cut in the first pair of lines so that each area of sheet between each respective pair of cuts in the first pair of lines and a respective nearest portion edge of the sheet defines a front section of a pocket, each area of sheet between each respective pair of cuts in the second pair of lines and a respective nearest portion edge of the sheet defines an upper bridge portion, a first region of each area of sheet between each pair of cuts in the first pair of lines adjacent and extending laterally from the respective connecting cuts defines a rear section of the pocket, and a second remaining region of each area of sheet between each pair of cuts in the first pair of lines defines a lower bridge portion.

Preferably a number of transverse fold lines, which may be score-lines or perforated or provided by any convenient means are provided at each end of each bridge portion to facilitate folding of the blank to form the pockets.

Each are defining a front portion may be provided with a cut defining a tab which may be folded to secure product when held in a pocket.

Each cut defining the tab may be any convenient shape such as a 'c' shape and may be provided with an appropriate fold line.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a perspective of a length of display device in accordance with a the present invention;

Figure 2 is a side elevation of a section of the display device of Figure 1;

Figure 3 is a perspective of a length of display device showing detent means and product; and

Figure 4 is a plan of a length of display device in a flat condition;

#### DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring first to Figures 1 and 2 a display device 10 comprises an elongate strip 12 of sheet material having a plurality of product carrying pockets 14 each pocket 14 being provided with a pair of laterally spaced front sections 16, 18 in a plane substantially parallel to the plane of an adjacent rear section 20 of the elongate strip 12, each front section 16, 18 being attached to said rear section 20 at its upper edge 22, 24 respectively,

by means of upper bridge portions 26, 28, further attachment between a further section 30 of the rear section 20 and the front sections 16, 18 is provided by a lower bridge portion 32 intermediate the front sections 16, 18 and which is attached adjacent the lower edges 34, 36 thereof. As can be seen in Figure 2 the pockets 14a, 14b, 14c etc., are arranged one above another so that the front sections 16a, 18a of an upper pocket 14a are in integral and coplanar attachment with the rear sections 20a, 30a of the pocket 14b immediately below.

It will be seen in Figures 1 and 2, and, in particular, in Figure 3, that product 38 is held, in this embodiment, in the space defined by the front and rear sections 16, 18, 20, 30 and the lower bridge portion 32. As can be seen further in Figure 3 the display device, for additional security and to prevent accidental removal of products, are provided with tabs 40a, 42a; 40b, 42b; etc. in each front portion to firmly engage the product when located in the pocket.

In Figure 4 a blank 100 for a display device of the type having a plurality of product carrying pockets has an elongate sheet 102 having a pair of substantially parallel spaced lines of longitudinal cuts 104a, 106a; 104b, 106b ; etc. running substantially centrally along at least one section of the sheet material, a second pair of substantially parallel spaced lines of longitudinal cuts 108a, 110a; 108b, 110b; etc. running one each intermediate the first pair of lines and a respective edge 112, 114 of the sheet, adjacent cuts in the first and second lines being joined by a connecting cut 116a, 118a; 116b, 118b ; etc. between the leading and of a respective cut in the second pair of lines and the trailing end of a respective cut in the first pair of lines so that each area of sheet between each respective pair of cuts in the first pair of lines and a respective nearest portion edge of the sheet defines a front section 120a, 122a; 120b, 122b; etc. of a pocket, each area of sheet between each respective pair of cuts in the second pair of lines and a respective nearest portion edge of the sheet



defines an upper bridge portion 124a, 126a; 124b, 126b; etc. a first region of each area of sheet between each pair of cuts in the first pair of lines adjacent and extending laterally from the respective connecting cuts defines a rear section 128a; 128b; etc. of the pocket, and a second remaining region of each area of sheet between each pair of cuts in the first pair of lines defines a lower bridge portion 130a; 130b; etc.

A number of transverse score-lines 132a, 134a, 136a, 138a; 140a, 142a; 132b, 134b, 136b, 138b; 140b, 142b; etc. are provided at each end of each bridge portion 124a, 126a, 130a; etc. to facilitate folding of the blank to form the pockets.

In the embodiment illustrated each area defining a front portion is provided with a 'c' shape cut 144a, 146a; 144b, 146b; etc. defining tabs, having a fold line 148a, 150a; 148b, 150b; etc., which tabs may be folded to secure product when held in a pocket. See Figure 3 for tabs in use.

## CLAIMS

1. A display device comprising an elongate strip of sheet material having a plurality of product carrying pockets each pocket being provided with a pair of laterally spaced front sections in a plane substantially parallel to the plane of an adjacent rear section of the elongate strip, each front section being attached to said rear section of the elongate strip, at or adjacent an upper edge thereof, by means of an upper bridge portion, a further attachment between a further section of the elongate strip and the front portions is provided by at least one lower bridge intermediate the front portions and which is attached thereto at or adjacent the lower edges thereof and the pockets being arranged one above another so that the front sections of an upper pocket are in integral and coplanar attachment with the rear sections of a pocket immediately below.

2. A display device as in Claim 1 wherein one or both of the front portions, is provided with detent means to firmly engage the product when located in the pocket.

3. A display device as in Claim 3 wherein the detent means is provided in both front portions and each comprises a tab adapted to abut either side of the products.

4. A display device as in Claim 3 wherein the tab is integral with the front portion.

5. A display device as in any preceding Claim wherein the upper and lower bridge portions are integral with respective areas of the front and rear sections and are provided by part of the respective section thereof.

6. A display device as in any preceding Claim wherein the upper and lower bridge portions are integral with respective areas of the front and rear sections and are provided by such parts which extend therebetween substantially at right angles to the substantially parallel

planes, which parts being defined by fold-lines adapted to allow the bridge portions to remain substantially at right angle to the parallel planes at least during use.

7. A display device as in any preceding Claim wherein there is provided any convenient number of pockets arranged continuously in stepped arrangement as described above.

8. A display device as in any preceding Claim wherein there is provided means to enable the loaded display device to be folded at least once along its length so that the loaded display device may be conveniently packed in a suitable carton or other container for shipment.

9. A display device as in any one of claims to 8 the stepped arrangement is interrupted by an intermediate flat section of elongate strip which flat section carries means to facilitate a fold.

10. A display device as in any preceding Claim wherein there is provided at its head thereof with means to attach the display device to other display apparatus.

11. A display device as in Claim 10 wherein such means is provided by a hole or slot.

12. A display device as in Claim 10 wherein such means is provided by a self-adhesive tape.

13. A display device as in any one of Claims 10 to 12 wherein where the display device is capable of being split, further attachment means is provided below the perforations in the intermediate flat section.

14. A blank for a display device of the type having a plurality of product carrying pockets comprising an elongate sheet of suitable material having a pair of substantially parallel spaced lines of longitudinal cuts running substantially centrally along at least one section of the sheet material, a second pair of substantially parallel spaced lines of longitudinal cuts running one each intermediate the first pair of lines and a respective edge of the sheet, adjacent cuts in the first and second lines being joined by

a connecting cut between the leading and of a respective cut in the second pair of lines and the trailing end of a respective cut in the first pair of lines so that each area of sheet between each respective pair of cuts in the first pair of lines and a respective nearest portion edge of the sheet defines a front section of a pocket, each area of sheet between each respective pair of cuts in the second pair of lines and a respective nearest portion edge of the sheet defines an upper bridge portion, a first region of each area of sheet between each pair of cuts in the first pair of lines adjacent and extending laterally from the respective connecting cuts defines a rear section of the pocket, and a second remaining region of each area of sheet between each pair of cuts in the first pair of lines defines a lower bridge portion.

15. A blank for a display device as in Claim 14 wherein there is provided a number of transverse fold lines, provided by any convenient means at each end of each bridge portion to facilitate folding of the blank to form the pockets.

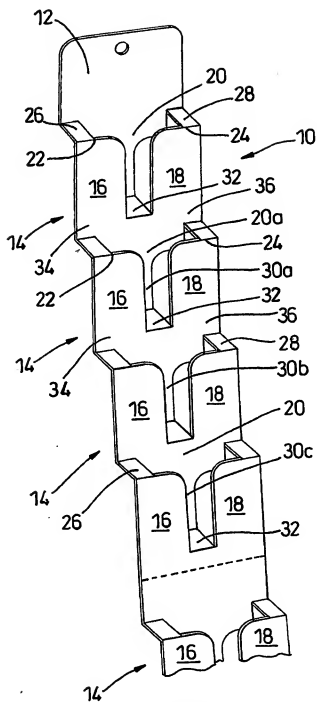
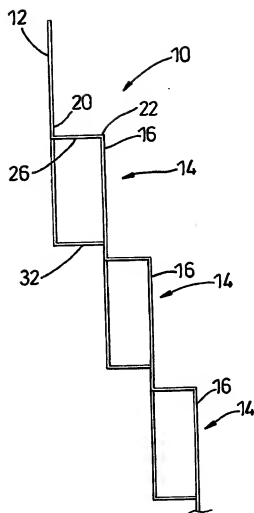
16. A blank for a display device as in either of Claims 14 and 15 wherein each line defining a front portion is provided with a cut defining a tab which can be folded to secure product when held in a pocket.

17. A blank for a display device as in Claim 16 wherein each cut defining the tab is of any convenient shape such as a 'c' shape and is provided with an appropriate fold line.

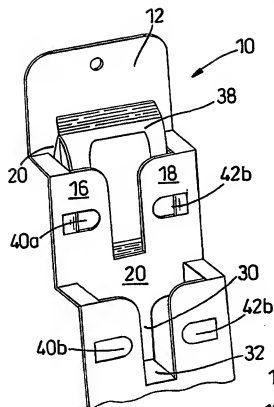
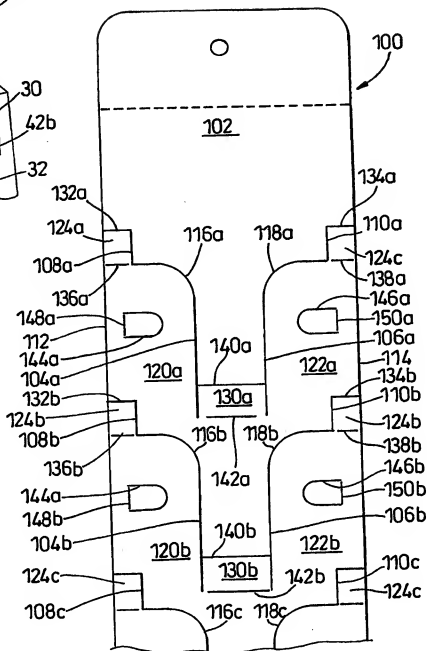
18. A display device substantially as hereinbefore described with reference to the accompanying drawings.

19. A blank for a display device substantially as hereinbefore described with reference to the accompanying drawings.

1/2

**Fig. 1****Fig. 2**

2/2

**Fig. 3****Fig. 4**

# INTERNATIONAL SEARCH REPORT

PCT/GB 03/03363

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 A47F/14 A47F5/11

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A47F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 394 878 A (ARVEY CORP) 6 July 1933 (1933-07-06) the whole document	1, 14
A	FR 2 532 536 A (BOUSSUGE JEAN CLAUDE) 9 March 1984 (1984-03-09) abstract; figures	1, 14
A	AU 578 222 B (MACGUIRE) 8 November 1988 (1988-11-08) abstract; figures	1, 14

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the International filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document relating to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the International filing date but later than the priority date claimed

- \*T\* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- \*S\* document member of the same patent family

Date of the actual completion of the International search

17 November 2003

Date of mailing of the International search report

02/12/2003

Name and mailing address of the ISA  
European Patent Office, P.B. 5818 Patentstra 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax. (+31-70) 340-3016

Authorized officer

Pineau, A

# INTERNATIONAL SEARCH REPORT

PCT/GB 03/03363

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
GB 394878	A	06-07-1933	NONE		
FR 2532536	A	09-03-1984	FR	2532536 A1	09-03-1984
AU 578222	B	08-11-1988	AU	578222 B3	08-11-1988